

SB 359

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1821

Chazotte

FACTS AND OBSERVATIONS

ON THE

CULTURE OF VINES, OLIVES, CAPERS, ALMONDS, &c.

IN THE

SOUTHERN STATES,

AND OF

COFFEE, COCOA, AND COCHINEAL,

IN EAST FLORIDA,

BY PETER STEPHEN CHAZOTTE,

WHO HAS FOR UPWARDS OF TEN YEARS BEEN ENGAGED IN THE CULTURE OF VINES, &c. IN SOUTHERN FRANCE, AND FOR SEVEN YEARS A GROWER OF COFFEE, COCOA, &c. IN THE WEST INDIES.



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*To the President, Senate, and House of Representatives of
the United States,*

ARE RESPECTFULLY OFFERED, FOR THEIR CONSIDERATION,

THE following facts and observations, on the policy of immediately introducing the highly interesting cultures of vines, olives, capers and almonds, in the now territory of the United States, and on the plantations of coffee, cochineal, cocoa, or chocolate nut in East Florida.

It has a hundred times been stated, that agriculture is the basis of the national wealth of empires. May I not be allowed to add, that it is the true source of individual happiness; that it secures independence and cherishes every virtue, the enjoyments of which are constant, without being contaminated by those vices which are frequently the attendants of manufactures.

That agriculture is alone capable of raising a nation to the highest degree of happiness and independence, the history of mankind will prove: from the earliest ages, man has been taught to call the earth, "his mother and beneficent nurse."

For the further development of my ideas on this interesting subject, I shall take a cursory view of the climates of southern Europe and Asia Minor, and look if I cannot find in our country, climates perfectly congenial to the growth of whatever plants are successfully cultivated in Southern Europe. In doing this, however, it is not my intention, to include wheat, barley, oats, nor any grains and vegetables which our country is known to grow to as great a perfection as in any other part of the world. I shall limit my inquiries to those rich staples which our soil will luxuriantly grow, and which we have until now neglected to cultivate.

Having resolved not to be deterred from prosecuting this plan of improvements by any of those idle ideas, which either prejudice, ignorance, or foreign policy, has been endeavouring to imbue our minds with, we shall clearly perceive all the advantages, which our insular coast, our extensive inward country, the variety of our climates, and our rich soil, give us over the nations of Europe. It is true that we cannot, at present, drain the marshes of Virginia, nor turn the dismal swamps of North Carolina, into Roman consular retreats and pleasure gardens. We need not occupy ourselves with works which require a more condensed population than

ours is. That shall be done, when the land distributed amongst millions of inhabitants, shall, by its increased value, promise a fair interest for the capital employed in its improvement; then, and not before, shall rich fields and stately mansions astonish the mariner sailing along our extensive coast. Leaving to future generations to effect what is not our interest now to do, we are at liberty to select our ground, to cultivate the plains or plant on the hills; we may choose the climate, the river, the particular soil; diversify our cultures; in fine, we may raise all the European fruits, and the most valuable tropical staples. From the cliffs of the Patuxent to the bluff which crowns the plains that form the banks of Mobile Bay, the vines may be cultivated, and the hills and vallies of Virginia, may, ere long, resound with the echoed songs of the vintagers.

Wishing to proceed with regularity and order, I shall trace out comparative parallel climates, both in Europe and the United States. And then, taking a separate view of each, I shall prove that, to all our already known productions may be added all those which we have not yet undertaken to cultivate. In forming this scale, I shall pay less regard to parallel latitudes, than to the parallels of the now existing climates. Parallel latitudes could not bring a fair comparison of climates. As for example, latitude 51, in France, would give, in America, the northernmost section of Newfoundland; north of the gulf of St. Lawrence, and running westwardly on the southern edge of Hudson bay; and it is well known, that, under the 51st degree of north latitude, in France, the climate is temperate, and the four seasons regularly marked; whilst, under the same latitude, in America, the climate is intensely cold, and only two seasons which are known to be striving to conquer each other. The cause of this may be a fit subject for a treatise.

Having thus far explained my motive for abandoning parallel latitudes, in order to form parallel climates, I shall establish them thus:

First climate in Europe.

Taking France from the 51st to the 45th degree of north latitude, forming two parallel lines running eastwardly, and including the northern sections of France from Bordeaux, Switzerland, Lombardy, Bavaria, Austria, Transylvania, &c.

First climate in the United States.

The parallel climate is found between the latitudes 41st and 35th, two lines running westwardly from the Atlantic, and including the southernmost sections of New Jersey, Pennsylvania, Ohio and Indiana; the whole of the states of Delaware, Maryland, Virginia, North Carolina, Kentucky and Tennessee.

Second climate in Europe.

From latitudes 45th to 40th including the southernmost sections of France, south of Bordeaux, one half of Spain, as far south as Oporto, in Portugal; the isles of Corsica, and Sardinia; Italy, as far south as the bay of Tarento; and including Dalmatia, Servia, Albania, Macedonia, Romania, and the northernmost part of Asia Minor, bordering on the Black Sea.

Second climate in America.

Its parallel is found from latitudes 35 to 32½ including the whole of South Carolina, and the northern halves of Georgia, Alabama, Mississippi and Louisiana.

Third climate in Europe and Asia Minor.

From latitudes 40 to 35 including Portugal, south of Oporto; the southern section of Spain; Oran, Algiers, and Tunis, on the northern coast of Africa; the southernmost part of Italy; the Island of Sicily; Greece, Morea; all the isles in the Archipelago, and those of Candia, Rhodes, Cyprus, &c. &c. Asia Minor, Syria, Mesopotamia, and Armenia.

Third climate in the United States.

Its parallel is found between latitudes 32½ to 29, including the southernmost parts of Georgia, as far south as St. Augustine, Alabama, Mississippi, Louisiana, Pensacola, and the northernmost part of East Florida.

Fourth climate in North America.

For which there is no parallel climate in Europe or Asia Minor.

From latitude 29th to 25th bordering almost on the tropic, and including, the remainder of East Florida, containing about 33 millions acres of land.

Let us now review those climates separately, with respect to their productions.

First climate in Europe.

There is not a single fruit, nor any grains or vegetables which this climate produces, even grapes, that are not likewise produced in,

The first climate in the United States.

For vines are successfully cultivated at *Vevay*, in Indiana, which lies under the highest latitude of this climate; if then, vines grow and bear plentifully good and perfectly ripe grapes at *Vevay*, what success would attend their cultivation on the upper land of Virginia, North Carolina, and Tennessee, where the climate is milder, the seasons more regular, the soil rich, and where tobacco grows in abundance, and even cotton succeeds, a staple which cannot be raised in Europe in this parallel climate! An undeniable proof, that this climate in the United States, is as favourable to the growth of grapes as that of France. We need but plant, and our labours will be recompensed with abundant riches.

Second climate in Europe.

This climate, besides what grows in the 1st, produces olives, capers, almonds, oranges, limes, pomegranates, and figs.

Second climate in the United States.

This, already produces oranges, limes, pomegranates, figs, &c. and if olives, capers and almonds, are not seen there, it is because none have yet been planted. It is a well known fact that indigo used to be cultivated there, and has of late years been neglected, because of the cotton being found more productive, besides, tobacco and rice, which are great staples for exportation. Now would it not exhibit a want of judgment to believe that neither olives, capers, almonds, nor vines, can succeed in so favourable a climate. Facts demonstrate, that notwithstanding Bonaparte's command to raise cotton in the southern provinces of France, every attempt was met with a discouraging failure; the summer was found to be too short, and all his endeavours to dispense with our cotton proved useless. Surely, then, that man must be

prejudiced or blind, who, after such strong evidences, will still doubt of our success.

Third climate in Europe, and Asia Minor.

This third climate produces only what is stated in the second, with the addition of some cotton, fit only to manufacture coarse goods.

Third climate in the United States.

In this climate is raised the finest cotton in the world, and besides those staples that already grow and may grow in the second, we raise sugar, which is a production of the torrid zone. In vain did Bonaparte's empire extend to the southernmost part of Europe; unable to find in it an inch of ground where the sugar canes could grow, he was reduced to extract a scanty supply of bad sugar from beets. It is then manifest, that our 1st, 2d and 3d stated climates are, separately and collectively, superior to those of Europe. And, if they do not produce wines, olives, capers, and almonds, they are not to be charged with being unfavourable to their growth, we alone are to be blamed for it.

Fourth climate south of the United States.

This fourth climate has no parallel in Europe, it lies between latitudes 29th and 25th, and being 4 degrees farther to the south, than any other section of the United States, it promises fair, from the nature of the soil and climate, to produce coffee, cochineal and cocoa; as for sugar, it may every where be raised abundantly.

Coffee, cocoa and sugar, are staples of the tropics, and we are satisfied, that as the latter is raised in Louisiana, the climate of East Florida must be much more favourable. Doubts may arise on the success attending the culture of the two first named staples, in the minds of such as are altogether unacquainted with it; but let those who are conversant with the subject decide, and I am confident of being strengthened in my opinion by an affirmative.

I shall here take a retrospective view of the progress of the plantations of coffee in the West India islands, and prove that where it was not expected to grow, experiments attended with success have removed all doubts.

In the year 1796, not a single coffee plant was cultivated in the island of Cuba. In the year 1769, that plantation be-

gan to be introduced in the island of Jamaica, for, in the year 1798, there was but a very scanty quantity raised in that island. That plant was chiefly cultivated in the colonies belonging to France; and, were it not for the French revolution, it is probable that, that rich staple would at this day be, as it formerly was, the principal cause of the ascendancy of France over England in supplying the whole of Europe with that colonial produce. Unfortunately, I do not say for France, but for the planters of that once happy and favoured island, St. Domingo, they were doomed to utter destruction, by the evil genius of a single man. That man was *Calonne*, prime minister to Louis the 16th. By that policy which in European cabinets, is called "*un coup de politique*," Calonne expected to arrest the revolution in its first brilliant progress, by diverting the minds of the French people, and directing it towards the safety of St. Domingo, where the interests of France seemed until then to have been concentrated. He resolved and ordered a dreadful revolt to be instigated there, and a man of colour, at that time in Paris, whose name was Ogé, was sent, and furnished with every facility the government could afford, to stir up a revolt amongst the mulattoes. Cape François was burnt—streams of human blood flowed,—civil war was kindled all over the island.—The French people were too busily engaged about redressing their grievances, to be deterred from pursuing the object in view, by *un coup de politique*. The inhabitants of that devoted colony were commiserated, but not relieved; and so deep and long endured were the sores of that oppressed people, that until their cure was effected, they could not busy themselves about healing the sufferings of their far remote countrymen. Artifice, cunning and deceit, on the one hand; enthusiasm on the other, misguided and stifled the best judgment of the nation; all was liberty, equality, philanthropy; and, with a view to oppose the revolted mulattoes, the blacks were declared free.

In the phrenzy of a mistaken philanthropy, the assembly of the nation were forming codes of laws, for the government of what they blindly called, regenerated colonies, and sending there commissioners. When *Monsieur*, then out of France, brother to Louis the XVI, and at present Louis the XVIII, wishing to save those sections that had not yet felt the regenerating laws of France, desired the British Ministry to take possession of the French colonies, the planters of the western and southren parts of St. Domingo,

imitating those of Martinique and Guadaloupe, received the British. A part of that rich colony was thereby saved for a time; and both Toussaint and Rigaud, two coloured chieftains fighting for power, on the supposed side of France, were on the eve of being conquered, when the island was suddenly evacuated by the English.

The policy of this unexpected evacuation is easily accounted for. The English general Boyer, on his entering Port au Prince, had written to the ministry that more colonial produce had been found stored in that single city, than the whole of the British Islands could produce in two years; and had urged the policy of securing the whole colony as a rich mine of wealth, which the nation would enjoy, at least, for as long as war with France should continue.

But the success of the French armies in Europe alarmed the British ministry:* they well knew that a general peace must, at some time or other, take place, and on such an event, St. Domingo must of course be restored to France. They could not reconcile with their hostile feelings, the idea of being instrumental to the preservation of a colony, which, on its being restored, would at once replace her rival on that superior eminence in the colonial trade, which she once enjoyed, and which it was their policy for ever to destroy. Therefore, they resolved to evacuate that Island as the surest means of effecting their purposes; general Maitland was sent thither; he made separate secret treaties with the two chieftains: some sham battles were fought, and the British troops apparently beaten, and repulsed in every encounter, without losing a drop of blood, surrendered the colony to the party-coloured legions of Toussaint and Rigaud. But they took considerable care to carry off with them a number of planters with their slaves, to cultivate Coffee in their colonies, and principally in Jamaica, where they had as yet been very unsuccessful.

This plantation was by this means cultivated there on a large scale; several planters were carried to Trinidad and other small British islands; and England now receives from Jamaica alone upwards of 50 millions of pounds of coffee, per year. Such planters as did not like to live under the

* Bonaparte had then conquered the whole of Italy, and was about sailing for Egypt; Moreau had silenced the northern powers; and Holland had, by the precipitate flight of the duke of York, become a sister republic of France; at this time continental Europe had sued for peace.

British sceptre and colonial regulations went over to Cuba, and some to Porto Rico.

Thus is coffee now cultivated in all the West Indies. Yet the whole of those Islands together, and the present state of Hayti, united with them, hardly yield one half of the quantity which St. Domingo alone formerly produced. This explains the cause of the present high price of that staple. The quantity now raised is 50 per cent. less than in the year 1784; and the number of consumers have increased in the ratio of five to one.

We have seen that coffee is at this day successfully cultivated, where it was thought it could not grow; it now remains to see, if East Florida is not likewise favourable to its growth.

This plant needs not too hot a climate; dry land produces the best quality; as for example: the Mocha coffee, in Arabia Felix, where rain is scarce and the soil sandy, is esteemed very superior. The small size of the grain and its rounded form, indicate that the land on which it grows is exhausted, and that the plant bears only a scanty quantity. In a virgin and rich land, this plant bears large crops; the grain is bigger, and flatted on one side; so that two grains united, have an oval form, which lies in the center, as the stone of a cherry, a fruit which it perfectly resembles, in size, shape and colour.

On the iron bound coasts of Hispaniola, Jamaica, Cuba, &c. this plant, as in Arabia Felix, bears, even in virgin land, but middling crops; on the high land, and an eastern, western, and northern expositions, it bears plentifully, because the atmosphere is there colder, the dew in the night constant, and sometimes a light white frost occurs.

In East Florida, the land is neither too dry nor too wet, nor is the climate too hot or too cold. This narrow neck of land, being washed by the sea on the south, east, and west, possesses all the advantages which an island enjoys; the sea breezes modifying the scorching vertical rays of the sun, and wafting away the approaching northern frost.

Two opposite opinions have been expressed and frequently repeated with respect to that country. Some assert it to be a dry sandy land, and others, a flat, muddy, unformed, rising ground. These assertions are altogether unfounded; as may be demonstrated by merely recurring to its topography. We see a neck of land 400 miles long, and about 130 miles broad, from the opposite beaches of which, the land

rises gently and gradually towards the centre; where are lakes connected with each other from south to north, to a distance of about 150 miles, without receiving any supply of water from any large foreign river; and about 40 small rivers, whose sources are, at from 30 to 40 miles distant from both shores, and whose waters are emptying themselves into the opposite seas. Now it is impossible for those great sinews of nature to exist in a flat muddy ground, which could at most produce reeds, and not the stately trees, which luxuriantly grow and cover its surface? On the other hand, if it be called a dry sandy desert, the very existence of those lakes and numerous rivers belies those assertions, for rivers and lakes are never found to spring and exist in an entirely sandy country; and such is the narrowness of this long neck of land, that it must have a deep mould and prolific bosom to produce, as it is known to do, stately forests of the most luxuriant mixture, which are constantly in bloom, even in January and February; and the most beautiful flowers, whose florid appearance made the discoverers of it, award to that country the significant and appropriate name of Florida.

In all places, where the climate is not visited by black frost, the land either dry or wet will produce coffee. Cayenne, lying under the 4th degree latitude, north of the equator, where the heat is intense, no mountains but at 500 miles off, a flat, level, and drowned country, and where, as in European Holland, the surrounding seas are striving to overwhelm the rising earth, even in this swampy country, drained by ditches, as reservoirs for the water, the coffee plant grows luxuriantly, even to the size of a plum tree.*

At Rio de Janeiro, the present seat of the king of Portugal's American empire, lying under the 23d degree of latitude, south of the equator, and as far as the province of Parana or Assumption, which reaches the 30th degree of south latitude, the coffee is found to grow. Why then should we not cultivate it between the 25th and 27th degrees of north latitude? that is to say, in East Florida? Will it be said, that under the 27th degree of latitude, to the southward of the equator, it is hotter than under its opposite degree north of it? This will be contradicted by those navigators and persons

* In the West Indies, this plant would grow to the height of 10 feet. Experience has shown the advantage of limiting its height at 4 feet, by which means, the branches from the earth up expand, and the plant acquires a stronger body, which, in consequence of its low height, is sheltered from the ravages of a hurricane, or the too heavy load of its fruits.

who have visited that country. Canton, in China, lies under the $22\frac{1}{2}$ degree of north latitude, and is the southernmost section of that large empire. The states north of East Florida, already produce as fine cotton as is raised in that empire. Why should we not also attempt to cultivate the tea plant? I do not understand this culture. Information on this interesting subject is expected from those American citizens, who, on a visit to China, shall not suffer their minds to be wrapt in a piece of nankin or sunk into a catty of tea; but soaring above their daily mercantile occupations, will seek for rest and diversion, in the acquisition of information and the collection of plants, for the benefit of their native country.

I shall close this digression by adducing some new evidences. In a proclamation of George the 3d, issued from the court of St. James, on the 7th day of October, 1763, and by the authority of a treaty of peace concluded at Paris, on the 10th day of February, in the same year, his Britannic majesty, in the second section of his proclamation, expressed himself thus:

“Secondly; The government of East Florida, bounded to the westward, by the Gulf of Mexico, and the Apalachicola river; to the northward, by a line drawn from that part of the said river, where the Chatahouche and Flint rivers meet, to the source of St. Mary’s river, and by the course of said river to the Atlantic ocean; and to the eastward and southward by the Atlantic ocean, and the Gulf of Florida, including all islands within six leagues of the sea coast.”

This government being given to colonel Grant, it was then expected, “that rice, indigo, silk, wine, oil, and other valuable commodities would be produced in great abundance.” The English at that time knew little or nothing about coffee,* hence they did not mention it in their enumeration. Sometime after, an English gentleman of fortune went to establish himself in East Florida; his labours were crowned with success, both in the culture of coffee, and sugar canes; and

* At this period coffee had not been yet cultivated in the island of Jamaica, as is proved by a representation made about the year 1770, to the court of St. James, by the planters and merchants residing in that island; and comprehended in seven chief grievances, the seventh of which I subjoin here.

“That cocoa or chocolate nut which was heretofore one of the principal commodities of this island, is now lost by the heavy duties that are laid upon it; and probably, our sugar, rum, ginger, &c. must have the same fate, if not timely remedied. *And as we have just now begun to plant coffee, we hope for a bounty to encourage that plantation, on our sending it to England; at least that there might be no duties laid upon it.*”

his establishments were already considerable, when the American revolution, in its effects, made Florida pass into the hands of Spain. The British government, finding Mr. Smith, or some such name, (for, although this is an historical fact, yet, not having the book, in which it is stated before me, my memory has not perhaps retained the true name,) had so far succeeded, would not allow him to remain there. They carried him off with his slaves, and destroyed every thing he had planted; for which loss and damages, the British government awarded to him a considerable sum. Besides these, travellers, who have visited that country assert to have seen coffee plants in several places, not cultivated for profit and revenue, but as a curiosity, the intrinsic value of which seems to be unknown to those who have planted them.

Mr. Carver,* says "so mild is the Winter that the most delicate vegetables and plants of the Caribbee Islands, experience there not the least injury from that season; the orange tree, the plantains, the goyava, the pine apple, &c. grow luxuriously." "Fogs are unknown there, and no country can therefore be more salubrious." Mr. Wm. Stork in his description of East Florida, gives the following account of it: "The productions of the northern and southern latitudes, grow and blossom by the side of each other, and there is scarcely another climate in the world that can vie with this in displaying such an agreeable and luxuriant mixture of trees, plants, shrubs, and flowers. The red and white pine, and the evergreen oak marry their boughs with the chesnut and mahogany trees. The walnut with the cherry; the maple with the campeach, and the braziletto with the sassafras tree, which together cover here a variegated and rich soil." "The wax myrtle tree grows every where here." "Oranges are larger, more aromatic and succulent than in Portugal. Plums, naturally grow finer and of a quality superior to those gathered in the orchards in Spain. The wild vines serpentine on the ground or climb up to the tops of trees. Indigo and cochineal† were advantageously cultivated there, and in the year 1777, produced a revenue of 200,000 dolls."‡ In fine I shall add, that this country will produce all the tropical

* Universal traveller, page 604.

† I do not understand the raising of it, which is immensely productive, but I know that the neighbourhood of Pensacola, is the place where it will produce much.

‡ In the year 1804, I was cast upon the southernmost point of East Florida, and although it was in the month of February; I beheld that country, covered with green trees and flowers; the image of an everlasting Spring.

fruits and staples by the side of those belonging to a northern climate.

Having, I presume, adduced sufficient evidence in support of the position I have taken, and demonstrated that coffee, cocoa, and sugar canes, will grow every where in East Florida, as well as vines, olives, capers, almonds, &c. and that vines may likewise be successfully cultivated as far north as the Patuxent in Maryland. I shall now take a separate view of each of these rich productions, and from accurate knowledge, give a statement of the proceeds of a man's yearly labour. In this statement, I shall allow but one half of the work, which experience shows a man easily does,* and their moderate calculations, being at no time liable to deceive our expectations, we may, with more certainty, form a proper estimate of the advantages or disadvantages of those cultures; and whether we are not to be benefited, both as individuals, and as a nation, by immediately undertaking the grand work, or leave all the riches accruing from it, to those who already enjoy them.

It cannot be expected that I shall enter into the particulars and minutiae of the culture and preparations of those commodities. My intention, at present, is not to teach, but to enlighten the mind on a subject, foreign to the present agricultural pursuits of our citizens. A work, describing every particular, would, at this stage, excite curiosity, without promising any real advantages. Such a work, I shall cheerfully undertake, when I see that spirit of enterprise which characterises the American people, roused and elevated to that degree of national pride and grandeur, as shall warrant its publication.

First statement on Coffee.

One acre of land planted by ranges, and the plants at 5 feet distant from each other, gives 1764 plants. A man can take care of 2 acres—which give 3528 plants. Each plant, may,

* Coffee; 2 acres to each man. There is no tilling or hoeing; the only labour, is to prevent grass from growing between the plants, and the picking up of the fruits, which is the most laborious; otherwise, a man could easily take care of five acres of land.

Cocoa; 4 acres to each man. There is no culture whatever; the labour is in cutting off the nuts and drying the fruits.

Vine; 5 acres to each man. Which are to be ploughed three times a year. In cutting off the fruits, or vintage time, additional hands are necessary.

Olives, capers, almonds, need no culture; hands are necessary only to get the crops in, and extract the oils.

by an average, yield 2lbs—or more; but I reduce it to one pound: therefore a man will give yearly, 3528 lbs of coffee, which at 25lb, produce, 882 dollars.

It is to be observed, that no crop is to be expected on the 1st and 2d year; on the third year the plant yields a good crop, on the 4th an abundant one, which it will continue to yield every year until the ground is exhausted and the plant dies—For the two first years of the planting, all kinds of vegetables and corn, may be planted between the ranges; they will yield two crops in one year—cotton is not to be planted between the ranges.

Second statement on Cocoa.

Four acres of land planted in rows, and the trees at 10 feet distant from each other, give 1764 trees. A man is capable of taking care of them, and of gathering the nuts. At 7 years of age, each tree will yield 2lbs, and the quantity will increase with its age; therefore, a man will gather 3528lbs. of cocoa, which at 15 cents per lb, will produce 529 dollars and 20 cents.

This cultivation, differing from all others, requires some illustrations. It was formerly thought that its culture required much labour, and a virgin soil; but experience has shown, that it grows on land half exhausted by the coffee plant; and in less than 12 years' time acquires such power as to destroy the coffee underneath. Hence it is now planted between the ranges of coffee; when this last is about 7 years of age; so that, when the land would otherwise become a mere waste, requiring a hundred years for forests to rise on it again, ere it could recover its first fruitfulness—the same land, being again covered by a new forest of productive trees, the fruits of which growing and maturing all the year round, each day brings in its crop. I could not select a more proper place to state, that it seems, that providence, in its wise dispensations, intended the cocoa tree, should be the means of quickly renewing the soil exhausted by other productions. It is a fact known to myself alone at this moment, because, he who made the successful experiment, Mr. Berlie, and those who were eye witnesses to it, were by the bloody effects of St. Domingo's regenerating system doomed to an untimely grave, and I am the only survivor. The fact is this: Mr. Berlie, a planter on the high land of Donna Maria, had planted, after the coffee had exhausted

his land, the whole of his estates with cocoa trees—This answered well; but as coffee became more productive, he thought of making an experiment, which was, to cut down 20 acres of cocoa trees, setting them on fire, in the same manner as is done in clearing new land, and planting them again with coffee, it was found that coffee grew more beautifully than it had done before. The cocoa trees were when cut down 25 years old.

The extraordinary effects of the cocoa tree, in regenerating the ground upon which it grows, may easily be accounted for. This tree seldom attains higher than 15 feet; it is branchy; its leaves very large; and the body, or stock, of a middling size; the leaves continually falling off the tree, whilst new ones grow, cover the earth with a thick bed of leaves, which allow not even a blade of grass to grow with them; hence the ground requires no culture, and the trees but a light pruning, when any ravages have been caused by some storm. This constant thick bed of leaves, returns to the earth five times more nutriment than the diminutive size of the tree requires from it, and in less than 30 years, it brings the soil back to its original fertile state.

Third Statement On Vines.

Having given the proceeds of a man's yearly labour in the plantation of coffee, and cocoa, I shall now quit Florida, and enter the territory of the United States.

An acre of land planted with vines, allowing 41 ranges, at 5 feet distant, and to each range, 104 vines, at 2 feet apart, gives, 4264 vines, to an acre. Five acres for a man's labour give 21,320 vines, and allowing the grapes of 10 vines, to yield one gallon of wine, it will produce 2132 gallons, which being rated at the low price of 30 cents per gallon, will produce 639 dollars and 60 cents for a man's yearly labour.

This plantation is the most beautiful and luxuriant in nature: for nothing can equal the fascinating sight of a well cultivated vineyard. And as olives, capers, and almond trees, require no particular culture, they may be planted in ranges, at 30 feet distant, in the vineyard, where the mildness of the climate allows the plantation. In Georgia and Alabama, these four productions may be raised on the same soil. In a more northern climate, the vines must be cultivated separately. So much may be said on this very interesting subject, that it would require more time than I have resolved to bestow on it at present. I shall only add; that it offers an inexhaustible source of private and national wealth; because these plantations may be made to last for ages.

*Fourth Statement on Vines, Olives, Capers, and Almonds
Planted on the same ground.*

5 acres in vines—produce as before stated, for a man's yearly labour	\$639 30
175 Olive trees, at 30 feet distant, will yield after 7 years of age, about one gallon of oil each, which valued at the low price of \$1 50 cts. per gallon is	\$262 50
45 Almond trees, } 25 Capers do. } produce valued at \$1 50	105
70 Yearly proceeds of a man's labour	\$1006 80

Review of the above.

I shall now suppose, that in the course of 30 years we may employ 50,000 persons in the culture of vines singly, they will cultivate 250,000 acres of land which will yield an annual revenue of \$31,965,000

50,000 persons in the culture of vines, olives, almonds, and capers, on 250,000 acres of land will yield an annual revenue of \$50,340,000

Total	\$82,305,000
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Cocoa.

50,000 persons engaged in the culture of cocoa, will cultivate 200,000 acres of land, which will yield an annual revenue of \$26,420,000

Coffee.

100,000 persons engaged in the culture of coffee, will cultivate 200,000 acres of land, which will yield an annual revenue of \$88,200,000

Recapitulation of the preceding estimates.

100,000 persons cultivating 500,000 acres in vines, olives, &c. produce	\$82,305,000
50,000 persons cultivating 200,000 acres cocoa	26,420,000
100,000 persons do 200,000 acres coffee	88,200,000
250,000 persons do 900,000 acres produce	196,925,000

The home consumption of this country, may be estimated to be annually about, viz:		Leaving an immense surplus for exportation to foreign countries, of	
Wines, olives, &c.	\$17,305,000	Wines, olives, &c.	\$65,000,000
Cocoa, &c.	6,420,000	Cocoa,	20,000,000
Coffee,	13,200,000	Coffee,	75,000,000
Home consumption \$36,925,000		Exportation	\$160,000,000

It will then become a matter of policy, for the federal government, to change the existing fiscal laws and regulations with respect to those staples of exports. The citizens paying no longer any duties on those articles which now form the principal revenue of the national government, duties on their exportations must of course be recurred to. The estimate of which might perhaps give the following

Fiscal Duties,

which I value, at an average of 15 per cwt. It neither becomes me, nor does it enter in my plan, to trace scales of proportions on matters which must be left to the wisdom of congress; and in forming that average, I merely have in view to ascertain the probable results of my recapitulation and statement of surpluses; and I find the annual receipts in the several custom houses, would amount to \$24,000,000.

There is no reason whatever, that can prevent us from employing in those several cultures, at least 500,000 persons on 1800,000 acres of land, which would yield an annual income of \$393,850,000.

And supposing that on account of our immense produce, we lowered the prices in all the markets in the world, even one third of the low prices at which I have valued them, yet the labours of 500,000 working men, would give annually the sum of \$262,566,667.

Considerations of such vast importance are not to be overlooked. We have but to begin the work, and before 30 years are elapsed, more than 500,000 European emigrants will be seen crossing the Atlantic ocean to unite their labours and industry with ours; and every thing concurring to increase our wealth, power, and commerce; and the Almighty making even the tyrants of Europe subservient to our grandeur, we shall then be the most powerful, as we now are, the freest and happiest nation on the globe!!!

I need not, I think, add any thing to what I have already said, on the importance of the acquisition of East Florida. The simple statements I have given, and it being the only

land adjoining the territory of the United States where coffee and cocoa will grow, is sufficiently interesting to excite a laudable desire of seeing it pass into our possession; however, we must be contented with waiting patiently for the final decision of congress.

To form an accurate estimate of the value set upon those rich productions, we need but peruse the modern history of the nations of Europe. The whole of Germany, Denmark, Sweden, Prussia, Russia, Poland, and Turkey, may be set in a flame by wars, as in the time of Charles the 12th of Sweden, and yet navigators will no where meet with war on the seas; but the moment that France or Spain gets into disagreements with any of the nations of continental Europe, not only is that section of the world kindled with flame and deluged in blood; but the seas around the globe witness scenes of horror and carnage. And why? because, the present object of warfare is no longer what it formerly was; the acquisition of one or more provinces in Europe can not move England, but she sets the world on fire to sell her manufactured goods, monopolize commerce, and obtain possession of the French, Spanish, and Dutch colonies; these she values more than kingdoms, although she feigns to fight only for the balance of power. Immediately after the peace of 1801, the French government sent armies to recover St. Domingo—the rebels must have submitted—the British ministry calculated the future consequences of such a submission—and Malta, a rocky isle, not worth a shilling in agriculture, suddenly became a pretence for the bloody and long war that ensued. France lost St. Domingo and the Isle of France, and Holland the cape of Good Hope, Ceylon, &c.* Thus,

* The British government, notwithstanding the immense profits accruing to the nation from the rich commodities and staples produced by its colonies, look upon them as if they were mere marts for the sales of its manufactured goods, or stations for its numerous ships of war. The virtuous pursuit of agriculture, (out of the limits of England) is cramped in all its efforts, for the purpose of giving employment to the corrupted rabble of its manufacturing cities; to enrich ship builders and ship owners; to protect privileged companies of monopolists; to oppress the industrious artisans; to drain the purse of the affluent, and multiply the number of paupers. Hence, the interests of the colonies have seldom been attended to. Their colonial system is so bad, that it seems to have been framed by an avaricious company of ship owners, whose chief object was to force the growers of sugar and coffee to load their ships, and pay them a heavy freight. A grower of coffee is oppressed by the existing colonial system; and the crown, again oppresses the consumer; for no man in England can roast his coffee as he pleases; he must buy it from a monopolist.

Europe has fought thousands of battles and slaughtered six millions of victims on the altar of avarice and commercial monopoly!!

Spain, who for many centuries has been pursuing the most absurd policy by discouraging agriculture, to foster the working of her silver and gold mines; who has left uncultivated the most fertile land on the face of the earth, and made of her formerly active citizens, the most indolent people in the world, is now endeavouring to repair the ruins caused by so blind a policy. Porto Rico and Cuba, are now thought capable of producing ten thousand times more riches than all the mines of Peru. The greatest efforts are at this moment making by that regenerated government to place those two islands in a high state of cultivation; emigrants are encouraged free of expense. Thirty-three acres of land are given to each individual; they are fed during the six months immediately following their arrival, and furnished with every necessary tool and instrument of agriculture, they are besides, free from all kinds of taxes for the space of ten years, and to such as wish to purchase land, the government sell 330 acres for 450 dollars on credit, five years without paying any interest; after which an interest of six per cent is required until perfect liquidation of the whole debt. This enlightened and liberal policy would, in less than ten years, triple the actual revenue of those Islands, were it possible to establish a mutual confidence between the Spaniards and strangers;* a confidence which has so many times proved deceptive on the side of the Spaniards, and ruinous for the industrious strangers among them.

A government founded as our is, on the most liberal principles of political economy; whose very existence is a seal that secures the happiness and liberty of the least of its members; whose policy is to increase the wealth of the nation; and whose chief magistrate, is, as it were, placed on a high tower, to direct the uncertain steps of the enterprising patriots, and the inexperienced labours of the citizens; must, more than any other government, feel interested in promoting the culture of whatever staples are found capable of increasing the prosperity and commerce of the country. I fond-

* This new colony of Fernandina de Xagua, is not likely to succeed, although upwards of two thousand emigrants have already repaired there. I know the person who acts there as a chief for the Spanish government, and know also, that his exactions will ultimately ruin that establishment.

ly cherish the hope, that government will eagerly encourage the culture of the productions I have already enumerated; congress need, I presume, in those things, for which they have not had any opportunity of acquiring practical knowledge, but to be made acquainted with the importance of those plantations, by those, whose long experience enables them to communicate these useful facts. As one of the very few, in the United States, qualified to discharge this important duty, and being acted upon by those mighty considerations which work so powerfully on the heart of a true citizen, I respectfully submit for the consideration of the president, the senate and house of representatives of the United States, the outlines of a project for effectually encouraging the plantations of vines, olives, capers, almonds, coffee, cocoa, &c. &c.

The first preliminary steps to be taken in order to carry the proposed plan into execution, must be the securing of East Florida; the southern part of which may be planted in coffee and cocoa, and is, in fact, worth twenty times more than the swampy land claimed by the United States west of New Orleans.

This being obtained, several considerations of a primary nature offer themselves to the mind; for although every citizen is free to chose his culture, yet, it is not in the power of every one, wishing to cultivate those rich plants, to procure them at the moment they are wanted. Hence, when citizens are left without a helping hand, discouragement ensues, and what may be effected in three years by the fostering hand of government, may require a century, when left to the discretion and impotence of inexperienced individuals. They must be guided; they must be taught; they must have a place, where they will apply for plants, and also acquire that information which no book can give; they must be dissuaded from cultivating the aboriginal grapes which, though they might prove of an excellent quality are not worth the trouble of a trial: because, however productive they might be found in the end, yet, it would require more than forty years culture, before they could attain that delicacy of softness and perfection, which ages of culture and care alone can give. The government, by means of its numerous consuls, may procure the first qualities of plants and seeds. From France and Italy, the best qualities of vines, olives, figs, capers and almonds. From Madeira and Portugal, their spirituous and astringent vines. From Samos, Chio, Candia, and Cyprus,

their sweet delicate and restorative cordial vines. There is a great analogy between men and plants. Man must be subdued by the slow progress of knowledge, to the rule of civilization, ere he attains that superiority of intellect and spiritual ideas, which bespeaks him to be a being inferior to God alone; plants obtain their perfection only in proportion as man improves his mental powers, and labours to raise them to the height of his intellectual faculties. Five ages have passed away, and yet the man, who inhabited the soil, which we at this day tread on, is still a fugitive in the deserts; all our efforts to overtake him, and make him a civilized man have proved fruitless; he prefers death to civilization; he flies off, avoids our meeting, and before long, it will be said, "here were once innumerable nations of warriors that have evanished away," a disappearance that will confound the sagacity of future philosophers—because, they will know man only in his civilized state, and shall no where find that being in the simple state of nature.

I beg to be excused for these fugitive ideas; they have forced themselves on my pen. I resume my subject. From Cuba, in less than twenty-four hours, we may receive as many coffee seeds as we want. From the western part of St. Domingo, say, Donna Maria, or from the Spanish main in the province of Venezuela, say, Carracas and Maracaibo, we may obtain the nuts that will afford the necessary seeds.

These preliminary remarks bring me to the conclusion, which I shall improve, by humbly offering to congress a plan, for effectually encouraging the plantation of the fore-mentioned valuable staples.

1st. That it is requisite for congress to allot one thousand acres of land, to be selected by a proper judge, for the purpose of establishing a grand national nursery of those rich plants.

2d. That it is of the utmost national urgency, that under the superintendence of the president of the United States, this establishment should be instantly commenced, and that the president should select such person or persons, as shall have given undoubted proofs of their qualifications to conduct and superintend the establishment.

2dly. That to the end of immediately enabling this establishment, to furnish the citizens with the necessary plants, fifty thousand dollars ought to be appropriated, for the perfect and quick execution of the object in view.

3dly. That the president of the United States be autho-

rised, to appoint a proper person to go as agent to Europe, to select those plants, and species of vines, that are known to be most productive, both for quality and quantity; or otherwise, to empower the consuls, in those several countries, to procure and forward the plants and seeds requested, and to make a necessary distinction of species, in the several plants, in order that none but the very best, should be introduced into America.

4thly. That as coffee will, three years after it is planted, cocoa five years, vines four years, olives, capers, and almonds, seven years, produce sufficient seeds and vines, to supply every demand; these should, on the first reception of the several plants and seeds, be cultivated in the establishment on a large scale, with a view: 1st. To multiply the plants and seeds, and to increase the nursery which may also be commenced immediately: 2d. To form a school for the culture and management of those plants, where every citizen should have the privilege, of repairing to acquire those informations and practical knowledge that no book extant can give.

5thly. That, with a view to discountenance idle demands, and thereby prevent the wanton waste of these plants, a thing which would frequently happen, if they were given gratis, the chief director, acting as superintendent of the establishment, should be authorised to sell them to individuals at the following rate:

Coffee plants,	2 cents a piece
Cocoa do.	3 do do
Vine plants,	3 do do
Vines,	1 do do
Olive plants,	100 do do
Capers and almonds,	75 do do

Which would yield a revenue, which, in six years, would repay the government the fifty thousand expended in the establishment, and leave a benefit of upwards of one hundred thousand dollars.

On the 7th year the demands for coffee and cocoa plants will begin to decrease, because they will be procured from every individual, who shall have already planted them. For ten years more, the vine plants and vines, will be in great demand, when they will decrease; and the olive, caper, and almond plants, will for twenty-five years longer continue in great demand, when the establishment as a nursery, will cease to be productive in this high degree.

Thus having afforded the means of planting the best spe-

cies of vines in the world, we may, ere ten years have elapsed, produce wines equal in quality to any in the world; a quality which will vary according to the climate and soil, where they may happen to be cultivated. It is a general, and yet very wrong impression to think, that vines will grow only on such and such soil. Vines grow even on the worst land, and steepest hills and mountains; in cold and hot climates. Hence proceeds the great difference in qualities: on clay and very poor land, such that no other productions can grow, is made those common wines, which being unfit for exportation, are distilled into brandy, for it requires 7 casks, or 420 gallons of wine, to get a pipe of brandy of 90 gallons.

What I have stated in the preceding sheets will exhibit in a strong point of view, the importance of establishing a national nursery, in order to promote, foster and effectually afford the means of successfully cultivating on a large scale these highly rich productions, which, in less than twenty-five years, will double the actual revenue of the country; create new and inexhaustible resources; invigorate commerce, and render it at all times flourishing, by the exportation to foreign countries of our vast surpluses.

Considerations of such magnitude as these, will, I have no doubt, operate powerfully on the minds of our legislators, whose honourable mission is to mature plans, form schemes, and ensure by wise laws, the happiness, prosperity, and glory of our country. And if it be not considered a departure from that reverence, which a private citizen owes to the chief magistrate and representatives of a whole people, to dare impart to them ideas, on subjects, till now foreign to the sphere of their legislative labours, I hope, that I shall not be thought too presuming to approach them with diffidence and respect, and entreat them, to grant a moment's attention to the contents of these sheets; should they prove worthy of those to whom they are respectfully submitted, I shall esteem myself honoured for having thus far, been instrumental to the increase of the wealth of the nation, and contributed a share, in her welfare and prosperity.

PETER STEPHEN CHAZOTTE.

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